58. (New) The method of claim 58, wherein the assay is a radioimmunoassay or an enzyme immunoassay.

CAP B

(New) The method of claim 59, wherein the assay is an enzyme-linked immunoassay or a fluorescent immunoassay.

REMARKS

In addition to the foregoing amendments, the following remarks should help in clarification of some of the sequences and sequence citations.

Amendments to the specification

Pursuant to 37 C.F.R. §1.121(a)(6), all of the above amendments find support in the specification, and do not introduce new matter into the application. Support for the amendments is as follows:

Figure 5 shows SEQ ID NOS:1, 2, 78, 77 and 76.

Figure 7 shows SEQ ID NO:7.

Figure 8 shows SEQ ID NO:8.

Figure 9 shows SEQ ID NOS:49 and 12.

Figure 11 shows SEQ ID NOS:105 and 111.

Figure 13 shows SEQ ID NO:240.

Figure 14 shows SEQ ID NOS:86 and 107.

Figure 15 shows SEQ ID NOS:51, 241 and 242.

Figure 16 shows SEQ ID NOS:150 through 173.

SEQ ID NOS:97, 140 and 138 correspond to sequences that are in the sequence listing as originally filed, and thus are not new matter.

Page 27, lines 14-17 and Figure 24 define SEQ ID NOS:208 and 209 as human pre region nucleotide sequences.

Please also note that in the sequence listing, SEQ ID NOS:104 and 133 are intentionally skipped. Thus, these two SEQ ID NOS are not described or mentioned in the specification.

Amendments to the sequence listing

In accordance with 37 C.F. R. §1.825(a), the foregoing amendments to the sequence listing do not introduce new matter, and are supported in the application as follows:

Support for the amendments to SEQ ID NOS:11 and 12 can be found at Figure 7 and Figure 8 which show these sequences, respectively.

The amendment to SEQ ID NO:81 is supported in Figure 11, which shows the sequence.

26420.doc 8

The amendment to SEQ ID NO:240 is supported by Figure 13, which shows the The amendment to SEQ ID NO:241 is supported by Figure 15, which shows the

sequence.

The amendment to SEQ ID NO:242 is supported by Figure 15, which shows the sequence.

Page 9, line 22 and Figure 14 introduce and describe SEQ ID NO:86, respectively.

<u>Support for new claims</u>

The claims 1 and 21-23 are canceled without prejudice or disclaimer, and new claims 33-60 have been added. The new claims 33 - 60 contain no new matter, since they are fully supported by the specification.

Support for the claims that are drawn to isolated antibodies and their method of production, *i.e.*, claims 33 - 36, is found at least at page 58 line 34 - page 59, line 1, page 59, lines 11 - 16, and page 60, lines 3 - 21.

Support for the claims that are drawn to antigens comprising various peptides, oligopeptides, and GDNF-family conserved peptides, *i.e.*, claims 37 - 40, is found at least on page 59, line 17 - page 60, line 2 and page 92, line 17 - page 96, line 4.

Support for the claims that point out specific sequences to which the antibodies are directed, *i.e.*, claims 33, 40, 50 and 51, is found at least at page 5, line 22, page 21, line 4, page 22, line 2 and page 10, lines 16 - 25.

Support for the claims that are drawn to methods of detecting persephin or persephin family members in a sample and determining antigen/ antibody binding, *i.e.*, claims 41 - 60 is found at least at page 57, line 36 - page 58, line 8.

Applicants respectfully request that the amendments and remarks herein be entered into the case. Should any questions arise or if Applicants' attorney can facilitate the prosecution of this case in any way, it is requested that the undersigned attorney be contacted.

Respectfully submitted,

Elie H. Gendloff Reg. No. 44,704

Howell & Haferkamp, L.C.

7733 Forsyth Boulevard, Suite 1400

St. Louis, Missouri 63105

(314) 727-5188

February 20, 2001